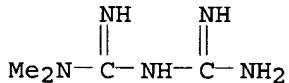


L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
RN 657-24-9 REGISTRY
CN Imidodicarbonimidic diamide, N,N-dimethyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Biguanide, 1,1-dimethyl- (6CI, 8CI)
OTHER NAMES:
CN 1,1-Dimethylbiguanide
CN Dimethylbiguanide
CN DMGG
CN Fluamine
CN Flumamine
CN Gliguanid
CN Haurymelin
CN Melbin
CN Metformin
CN Metiguanide
CN N'-Dimethylguanylguanidine
CN N,N-Dimethylbiguanide
CN N,N-Dimethyldiguanide
CN N1,N1-Dimethylbiguanide
CN NNDG
CN Siofor
FS 3D CONCORD
MF C4 H11 N5
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*,
BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS,
CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU,
DIOGENES, DRUGNL, DRUGU, DRUGUPDATES, EMBASE, GMELIN*, HSDB*, IFICDB,
IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, PHAR, PHARMASEARCH, PROMT, RTECS*,
SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1181 REFERENCES IN FILE CA (1947 TO DATE)
19 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1190 REFERENCES IN FILE CAPLUS (1947 TO DATE)
19 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=>

L13 ANSWER 1 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1996:137782 BIOSIS
DN PREV199698709917
TI Side-effects of **spironolactone** in women with **acne**.
AU Lubbos, H. (1); Kelijman, M.; Spielvogel, R. L.; Rose, L. I.
CS (1) Dep. Med. Dermatol. Med. Coll. Pa., Hahnemann Univ., Philadelphia, PA
USA
SO Journal of Investigative Medicine, (1996) Vol. 44, No. 1, pp. 51A.
Meeting Info.: Meeting of the American Federation for Clinical Research,
Southern Region New Orleans, Louisiana, USA January 31-February 2, 1996
ISSN: 1081-5589.
DT Conference
LA English
TI Side-effects of **spironolactone** in women with **acne**.

L13 ANSWER 2 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1994:70604 BIOSIS
DN PREV199497083604
TI Facial contact dermatitis due to **spironolactone** in an anti-
acne cream.
AU Vincenzi, Colombina; Trevisi, Pompilio; Farina, Paolo; Stinchi, Caterina;
Tosti, Antonella
CS Dep. Dermatology, Univ. Bologna, Via Massarenti 1, 40138 Bologna Italy
SO Contact Dermatitis, (1993) Vol. 29, No. 5, pp. 277-278.
ISSN: 0105-1873.
DT Article
LA English
TI Facial contact dermatitis due to **spironolactone** in an anti-
acne cream.

L13 ANSWER 3 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1993:211365 BIOSIS
DN PREV199395112590
TI Inhibitory action of **spironolactone** on DHT-stimulated
proliferation of human sebocytes in vitro: A possible anti-**acne**
mechanism of **spironolactone**.
AU Akamasu, Hirohiko (1); Zouboulis, Christos C. (1); Nishijima, Setsuko;
Asada, Yasuo; Orfanos, Constantin E. (1)
CS (1) Dep. Dermatol., Univ. Med. Cent. Steglitz, Free Univ. Berlin Germany
SO Acta Dermatologica (Kyoto), (1992) Vol. 87, No. 4, pp. 557-560.
ISSN: 0065-1176.
DT Article
LA Japanese
SL Japanese; English
TI Inhibitory action of **spironolactone** on DHT-stimulated
proliferation of human sebocytes in vitro: A possible anti-**acne**
mechanism of **spironolactone**.
AB Spironolactone is known to exhibit anti-acne activity in vivo. Its
mechanism of action was investigated in vitro using cultured human
sebocytes derived from sebaceous glands of the femoral skin.
5-alpha-dihydrotestosterone (DHT) enhanced sebocyte proliferation in a
dose-dependent manner. Spironolactone and DHT, simultaneously
administered, significantly inhibited sebocyte proliferation in a
spironolactone dose-dependent manner. These results may indicate that
spironolactone possesses an antagonistic activity on the stimulation of
the sebaceous gland by DHT. This mechanism of action may partly account
for the suggested therapeutic anti-acne effect of spironolactone.

L13 ANSWER 4 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1991:140548 BIOSIS
DN BA91:77088
TI EXPERIENCE WITH THE TOPICAL APPLICATION OF **SPIRONOLACTONE** AS AN
ANTIANDROGEN FOR THE TREATMENT OF **ACNE**.

AU CALIFANO L; CANNAVO S; SIRAGUSA M; GIRARDI R
CS VIA TRENTO, 1, MESSINA.
SO CLIN TER, (1990) 135 (3), 193-199.
CODEN: CLTEA4. ISSN: 0009-9074.
FS BA; OLD
LA Italian
TI EXPERIENCE WITH THE TOPICAL APPLICATION OF SPIRONOLACTONE AS AN ANTIANDROGEN FOR THE TREATMENT OF ACNE.
AB The authors report their clinical experience with topical treatment of seborrhic acne with a 5% spironolactone cream in 20 patients, 11 males and 9 females aged 12 to 28 years (average 20.5). Treatment duration, about one month. Treatment proved remarkably effective in that it brought about complete regression of acne in 30%, improvement in 65% of the patients. The drug was always well tolerated, side effects were never observed.

L13 ANSWER 5 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1989:339052 BIOSIS
DN BA88:42052
TI SPIRONOLACTONE AND CIMETIDINE IN TREATMENT OF ACNE.
AU HATWAL A; BHATT R P; AGRAWAL J K; SINGH G; BAJPAI H S
CS DIV. ENDOCRINOL., DEP. MED., INST. MED. SCI., BANARAS HINDU UNIV., VARANASI-221 005, INDIA.
SO ACTA DERMATO-VENEREOL, (1988) 68 (1), 84-87.
CODEN: ADVEA4. ISSN: 0001-5555.
FS BA; OLD
LA English
TI SPIRONOLACTONE AND CIMETIDINE IN TREATMENT OF ACNE.
AB In an open therapeutic trial, 50 patients with acne vulgaris were randomly allocated to one of two groups. One group received spironolactone 100 mg daily and the other cimetidine 1.6 g daily for 12 weeks. Clinical severity of acne and sebum excretion decreased significantly at the end of the trial with both drugs, but significantly more with spironolactone. Mean serum levels of testosterone, androstenedione and dehydroepiandrosterone-sulfate decreased significantly with spironolactone but showed no change with cimetidine. Our data suggest that spironolactone may be useful as antiandrogen in the short term therapy of acne vulgaris.

L13 ANSWER 6 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1988:486181 BIOSIS
DN BA86:117491
TI TOPICAL SPIRONOLACTONE INHIBITS DIHYDROTESTOSTERONE RECEPTORS IN HUMAN SEBACEOUS GLANDS AN AUTORADIOGRAPHIC STUDY IN SUBJECTS WITH ACNE VULGARIS.
AU BERARDESCA E P G; UCCI G; BORRONI G; RABBIOSSI G
CS DEP. DERMATOL., UNIV. PAVIA, POLICLINICO S. MATTEO 27100 PAVIA, ITALY.
SO INT J TISSUE REACT, (1988) 10 (2), 115-119.
CODEN: IJTEDP. ISSN: 0250-0868.
FS BA; OLD
LA English
TI TOPICAL SPIRONOLACTONE INHIBITS DIHYDROTESTOSTERONE RECEPTORS IN HUMAN SEBACEOUS GLANDS AN AUTORADIOGRAPHIC STUDY IN SUBJECTS WITH ACNE VULGARIS.
AB The interaction between spironolactone and dihydrotestosterone (DHT) receptors was evaluated with an autoradiographic technique. The inhibition of DHT receptors by spironolactone was found to be related to the decrease of tritiated DHT granules in the sebaceous glands of the treated site. 6 male patients affected by acne vulgaris entered the study. The acute study was performed by applying to 25 cm² of the back a cream containing 5% spironolactone under occlusive dressing. The dosage of spironolactone applied was 4 mg/cm² for 48 h. The long-term study was performed by applying the same amount to the entire back, without occlusion, twice daily for 1 month. Skin biopsies were taken at the end of the treatment, incubated with tritiated DHT and processed for autoradiography. Both the

acute and the long-term study revealed a decrease of the autoradiographic granules in the treated site. This effect is related to the binding of spironolactone with dihydrotestosterone receptors in the sebaceous glands. Our study demonstrates that 5% topical spironolactone cream acts as an antiandrogen in human sebaceous glands, competing with DHT receptors and producing a decrease of labelled DHT. At the concentrations used the effect has been only local. No side-effects were recorded during both studies.

L13 ANSWER 7 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1988:247470 BIOSIS
DN BA85:125872
TI TOPICAL TREATMENT OF ACNE WITH SPIRONOLACTONE.
AU MASSONE L; PESTARINO A; BORGHI S
CS VIA TRIESTE 13-NOVI LIGURE, ITALY.
SO CLIN TER, (1987) 123 (4), 271-273.
CODEN: CLTEA4. ISSN: 0009-9074.
FS BA; OLD
LA Italian
TI TOPICAL TREATMENT OF ACNE WITH SPIRONOLACTONE.
AB The authors report their clinical experience with an antiandrogen treatment employing spironolactone for topical use in a group of 25 female patients suffering from acne of the face. Clinical improvements allow to consider spironolactone cream 5% e a useful alternative to other therapies prescribed in the treatment of acne.

L13 ANSWER 8 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1988:137117 BIOSIS
DN BA85:71944
TI TOPICAL SPIRONOLACTONE IN THE MANAGEMENT OF ACNE.
AU TOMIDEI M; STRANI G
CS CORSO GROSSETO, 319, TORINO.
SO CLIN TER, (1987) 122 (2), 99-105.
CODEN: CLTEA4. ISSN: 0009-9074.
FS BA; OLD
LA Italian
TI TOPICAL SPIRONOLACTONE IN THE MANAGEMENT OF ACNE.
AB Twenty-one subjects with acne were treated with a product containing 2% or 5% spironolactone for topical use. Clinical improvement obtained by this treatment was satisfactory and allows to consider this preparation a useful alternative to traditional topical therapy.

L13 ANSWER 9 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1986:439369 BIOSIS
DN BA82:105557
TI ORAL SPIRONOLACTONE AN EFFECTIVE TREATMENT FOR ACNE
VULGARIS IN WOMEN.
AU MUHLEMANN M F; CARTER G D; CREAM J J; WISE P
CS DEP. DERMATOL., CHARING CROSS HOSP., LONDON W6 8RF, UK.
SO BR J DERMATOL, (1986) 115 (2), 227-232.
CODEN: BJDEAZ. ISSN: 0007-0963.
FS BA; OLD
LA English
TI ORAL SPIRONOLACTONE AN EFFECTIVE TREATMENT FOR ACNE
VULGARIS IN WOMEN.
AB The effect of oral spironolactone (200 mg daily) on acne vulgaris has been studied in 21 women in a randomized, placebo-controlled, double-blind crossover study using 3 month treatment periods. Compared with placebo, spironolactone produced significant improvement as assessed by subjective benefit ($P < 0.001$), number of inflamed lesions ($P < 0.001$) and by an independently evaluated photographic method ($P < 0.02$). There was a fall in sex hormone binding globulin but no significant changes in plasma testosterone and derived free testosterone. Initial plasma androgen levels were no higher in responders than in non-responders, nor did oral

contraceptive use appear to affect clinical response. Spironolactone is a useful alternative therapy for women with acne vulgaris.

L13 ANSWER 10 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1985:244989 BIOSIS
DN BA79:24985
TI ORAL SPIRONOLACTONE IMPROVES ACNE VULGARIS AND REDUCES
SEBUM EXCRETION.
AU GOODFELLOW A; ALAGHBAND-ZADEH J; CARTER G; CREAM J J; HOLLAND S; SCULLY P;
WISE P
CS DEP. ENDOCRINOL., CHARING CROSS HOSP., FULHAM PALACE ROAD, LONDON W6 8RF,
U.K.
SO BR J DERMATOL, (1984) 111 (2), 209-214.
CODEN: BJDEAZ. ISSN: 0007-0963.
FS BA; OLD
LA English
TI ORAL SPIRONOLACTONE IMPROVES ACNE VULGARIS AND REDUCES
SEBUM EXCRETION.
AB In a consecutive series of 36 male and female patients with severe acne, the effect of 3 mo. treatment with placebo or spironolactone (50-200 mg daily) on sebum excretion and clinical and endocrine status was evaluated double-blind. Patients (26) completed the study. Abnormal free androgen indices were found in 27% of the original 19 female subjects. Spironolactone reduced sebum excretion in all female subjects, but there was no correlation between sebum response and androgen status. The clinical response was dose-dependent, with maximum subjective and objective benefit when spironolactone doses of 150-200 mg were used.

L13 ANSWER 11 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1983:148386 BIOSIS
DN BR25:73386
TI TREATMENT OF FEMALE ACNE VULGARIS WITH A CREAM CONTAINING THE
ANTI ANDROGEN CANRENONE.
AU NIELSEN P G
CS OVERLAKARE, HUDKLINIKEN, CENTRALLASARETTET, S-961-85 BODEN, SWEDEN.
SO Dermatologica, (1983) 166 (5), 275-276.
CODEN: DERAAC. ISSN: 0011-9075.
FS BR; OLD
LA English
TI TREATMENT OF FEMALE ACNE VULGARIS WITH A CREAM CONTAINING THE
ANTI ANDROGEN CANRENONE.

L13 ANSWER 12 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1974:180089 BIOSIS
DN BA58:9783
TI ACNE IN PREMATURE OVARIAN FAILURE REESTABLISHMENT OF CYCLIC
FLARE-UPS WITH MEDROXY PROGESTERONE ACETATE THERAPY.
AU POCHI P E
SO ARCH DERMATOL, (1974) 109 (4), 556-557.
CODEN: ARDEAC. ISSN: 0003-987X.
FS BA; OLD
LA Unavailable
TI ACNE IN PREMATURE OVARIAN FAILURE REESTABLISHMENT OF CYCLIC
FLARE-UPS WITH MEDROXY PROGESTERONE ACETATE THERAPY.

L13 ANSWER 13 OF 41 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1969:52688 BIOSIS
DN BR05:52688
TI THE USE OF AN ESTROGEN 3 METHYL-ETHER-ETHYNYL ESTRADIOL DERMATOL AND A
PROGESTAGEN 6 CHLORO-6-DEHYDRO-17ALPHA-ACETOXY PROGESTERONE
DERMATOL AS A THERAPEUTIC METHOD OF TREATING JUVENILE ACNE
HUMAN.
AU ACEVES ORTEGA R
SO MED REV MEX, (1966) 46 (990), 277-280.

FS CODEN: MRMXA8.
LA Unavailable
TI THE USE OF AN ESTROGEN 3 METHYL-ETHER-ETHYNYL ESTRADIOL DERMATOL AND A PROGESTAGEN 6 CHLORO-6-DEHYDRO-17ALPHA-ACETOXY PROGESTERONE DERMATOL AS A THERAPEUTIC METHOD OF TREATING JUVENILE ACNE HUMAN.

L13 ANSWER 14 OF 41 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1985:12392 CAPLUS

DN 102:12392

TI Use of spironolactone in combatting acne

IN Messina, Michele

PA Schiapparelli Farmaceutici S.p.A., Italy

SO Ger. Offen., 11 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3411225	A1	19841004	DE 1984-3411225	19840327 <--
	DE 3411225	C2	19911107		
	EP 124147	A1	19841107	EP 1984-200329	19840308 <--
	EP 124147	B1	19871007		
	R: BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	US 4543351	A	19850924	US 1984-593926	19840327 <--
	CA 1204059	A1	19860506	CA 1984-450953	19840330 <--
PRAI	IT 1983-20435		19830401		

TI Use of spironolactone in combatting acne

AB The undesirable systemic effects of spironolactone (I) [52-01-7] in treating acne are eliminated by formulation in a cream. A cream was prep'd. from I 5.0, Tefose 63 (polyethylene glycol and its palmitate-stearate esters) 16.5, Labrafil 2130CS (polyoxyethylene satd. fatty acid glyceride) 4.0, paraffin oil 2.0, lavender oil 2.0, Me p-hydroxybenzoate 0.12, Pr p-hydroxybenzoate 0.05, Me p-hydroxybenzoate Na salt 0.03, and H2O 70.3% by wt. The cream was effective in treating acne in patients, and urine anal. showed no traces of I or its metabolites.

L13 ANSWER 15 OF 41 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1981:84376 CAPLUS

DN 94:84376

TI Anti-acne and anti-seborrhea prodrug derivatives of progesterone

IN Bodor, Nicholas S.; Sloan, Kenneth B.

PA INTERx Research Corp., USA

SO U.S., 8 pp. Cont.-in-part of U.S. Ser. No. 886,589.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4213978	A	19800722	US 1978-966585	19781205 <--
	AU 7945084	A1	19791129	AU 1979-45084	19790313 <--
	AU 520619	B2	19820211		
	CA 1148533	A1	19830621	CA 1979-323352	19790313 <--
	US 4268441	A	19810519	US 1979-57324	19790713 <--
	GB 2041219	A	19800910	GB 1979-39773	19791116 <--
	GB 2041219	B2	19830505		
	FR 2443471	A1	19800704	FR 1979-28847	19791122 <--
	DE 2948733	A1	19800619	DE 1979-2948733	19791204 <--
	JP 55085521	A2	19800627	JP 1979-158692	19791205 <--
PRAI	US 1978-886589		19780314		

US 1978-966585 19781205
AU 1979-45084 19790313
CA 1979-323352 19790313

TI Anti-**acne** and anti-seborrhea prodrug derivatives of **progesterone**

AB Title progesterone derivs. I [R = H, halo, C1-8 alkyl; R1 = H, HO, halo, C1-10 alkyl, R2CO2 (R2 = aliph, Ph, substituted Ph); R3 = H, Cl, F; R4 = H, C1-8 alkyl; Z, Z1 = O, SCR5R6CHR7NR8 (R5, R6 = H, alkyl; R7 = CO2R2; R8 = H, COR2, CO2R2)] and the 1-unsatd. and 4-unsatd. analogs of I were prepd. Thus, treatment of progesterone with L-Cys-OEt in pyridine at room temp. for 3.5 days gave 47% thiazolidine II. II gave high concns. of progesterone on skin where its anti-**acne** and anti-seborrhea effect was exerted over a long period without systemic absorption.

L13 ANSWER 16 OF 41 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1957:35765 CAPLUS
DN 51:35765
OREF 51:6834c-d

TI Pathogenesis of **acne vulgaris**. Preliminary research on the **estrogen-progesterone** activity

AU Meneghini, C. L.; Grattarola, R.
CS Univ. Milan
SO Riv. ital. essenze e profumi piante offic. olii vegetali saponi (1956), 38, 117-19
DT Journal
LA Unavailable

TI Pathogenesis of **acne vulgaris**. Preliminary research on the **estrogen-progesterone** activity

AB In 7 young women with **acne**, values of urinary estrogen and 17-keto steroid excretions, curves of basal temp. and aspects of vaginal cells were observed during the menstrual cycle revealing a low and delayed progesterone activity.

L13 ANSWER 17 OF 41 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
AN 96058724 EMBASE
DN 1996058724

TI Topical **spironolactone** in **acne vulgaris**.
AU Ersoy L.; Karaoglu A.; Kilic I.; Koc K.; Sen S.
CS Haseki Hospital, Dermatology Clinic, Istanbul, Turkey
SO Nouvelles Dermatologiques, (1996) 15/1 (37-40).
ISSN: 0752-5370 CODEN: NODEE2
CY France
DT Journal; Article
FS 013 Dermatology and Venereology
037 Drug Literature Index
LA English
SL English; French
TI Topical **spironolactone** in **acne vulgaris**.
AB In our research we have investigated clinical effectiveness of topical application of spironolactone, which has antiandrogenic effect, on **acne vulgaris**. In three groups with 20 patients each, to the first group we applied a cream containing 3% clindamycin in bepanthene cream base, to the second group 5% spironolactone in the same base, to the third group bepanthene cream + 5% spironolactone + 3% clindamycin. We registered positive behaviour in these three groups in controls we made on the 15th and the 30th days. At the end of the 30th day when comparing first and second groups with the third group, significant difference is observed in clinic recovery (p < 0.05). This proves that the use of the antiandrogen increases the effectiveness of the therapy.

L13 ANSWER 18 OF 41 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
AN 95087619 EMBASE
DN 1995087619
TI [Spironolactone therapy in **acne vulgaris**].

AU AKNE VULGARIS TEDAVISINDE SPIRONOLAKTON.
AU Yemisci A.; Gorgulu A.; Piskin S.
CS Dermatoloji Servisi, SB Kesan Devlet Hastanesi, Kesan, Edirne, Turkey
SO Deri Hastalıkları ve Frengi Arsivi, (1994) 28/4 (209-212).
ISSN: 1019-214X CODEN: DHFAEB
CY Turkey
DT Journal; Article
FS 013 Dermatology and Venereology
030 Pharmacology
037 Drug Literature Index
038 Adverse Reactions Titles
LA Turkish
SL English
TI [Spironolactone therapy in acne vulgaris].
AKNE VULGARIS TEDAVISINDE SPIRONOLAKTON.
AB Background and design. - Twenty-six female patients with acne vulgaris were treated with spironolactone 100 mg daily. The duration of treatment was 3 months. Results. - Favorable clinical responses were observed in 24 (65.71 %) patients, 5 of these patients (20.63 %) showed relapse. 14 (50 %) patients had menstrual side effects. Follicle-stimulating hormone (FSH), luteinizing hormone (LH), prolactin, testosterone, dehydroepiandrosterone sulphate (DHEA-S), progesterone and oestriodiol levels were measured. DHEA-S levels decreased after the treatment. Conclusion. - This study suggests that spironolactone is effective in the treatment of acne vulgaris.
L13 ANSWER 19 OF 41 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
AN 93274289 EMBASE
DN 1993274289
TI [Pharmacokinetic study for chronic topical spironolactone administration and sebometric analysis in patients affected by acne].
STUDIO DI FARMACOCINETICA PER APPLICAZIONE EPICUTANEA CRONICA DI SPIRONOLATTONE ED ANALISI SEBOMETRICA IN PAZIENTI AFFETTI DA ACNE
AU Berardesca E.; Gabba P.; Grazioli I.; Melzi G.; Rabbiosi G.
CS Università di Pavia, Clinica Dermatologica, Policlinico San Matteo, P.zza Golgi, 1, 27100 Pavia, Italy
SO Annali Italiani di Dermatologia Clinica e Sperimentale, (1993) 47/3 (237-241).
ISSN: 0365-169X CODEN: ADCRAG
CY Italy
DT Journal; Article
FS 013 Dermatology and Venereology
037 Drug Literature Index
LA Italian
SL Italian; English
TI [Pharmacokinetic study for chronic topical spironolactone administration and sebometric analysis in patients affected by acne].
STUDIO DI FARMACOCINETICA PER APPLICAZIONE EPICUTANEA CRONICA DI SPIRONOLATTONE ED ANALISI SEBOMETRICA IN PAZIENTI AFFETTI DA ACNE
AB The efficacy of spironolactone both in oral and in topical treatment is well known. Nevertheless, oral treatment with spironolactone can cause a lot of systemic antiandrogenic side-effects both in male and in female patients. The aim of this study was to evaluate the systemic absorption of spironolactone and its metabolites (canrenone, 7.alpha.-thyomethyl-spironolactone, 6.beta.-hydroxy-7.alpha.-thyomethyl-spironolactone) after prolonged topical application in 6 patients affected by acne. The second aim of the study was to evaluate in another group of 14 patients affected by acne, the change in sebum excretion during topical treatment with spironolactone. Results showed that no levels of spironolactone and its metabolites were found in the analyzed plasma samples indicating an

antiandrogenic action only at topical level. Moreover, the antiandrogenic activity is characterised by a gradual decrease in sebum excretion especially in patients with high basal levels of seborrhea. This can be explained as a 'normalization' of the androgen receptor activity of sebaceous glands especially in patients with androgenic hyperstimulation.

L13 ANSWER 20 OF 41 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
AN 93258030 EMBASE
DN 1993258030
TI [A controlled study **spironolactone** versus **progesterone** in the topical treatment of **acne**].
STUDIO CONTROLLATO SPIRONOLATTONE VERSO PROGESTERONE NEL TRATTAMENTO TOPICO DELL'ACNE.
AU Rafanelli A.; Grazioli I.; Melzi G.
CS c/o Direzione Medico-Scientifico, Schiapparelli Searle, Corso Belgio 86, 10153 Torino, Italy
SO Giornale Italiano di Dermatologia e Venereologia, (1993) 128/5 (XLV-IL).
ISSN: 0026-4741 CODEN: GIDVDZ
CY Italy
DT Journal; Article
FS 013 Dermatology and Venereology
037 Drug Literature Index
LA Italian
SL English; Italian
TI [A controlled study **spironolactone** versus **progesterone** in the topical treatment of **acne**].
STUDIO CONTROLLATO SPIRONOLATTONE VERSO PROGESTERONE NEL TRATTAMENTO TOPICO DELL'ACNE.

L13 ANSWER 21 OF 41 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
AN 93234814 EMBASE
DN 1993234814
TI [Topical **spironolactone** 5% versus benzoylperoxide 5% + miconazole 2% in the therapy of **acne**: Double-blind, controlled study to evaluate the efficacy and the eventual systemic absorption].
SPIRONOLATTONE 5% VERSO BENZOILPEROSSIDO 5% + MICONAZOLO 2%, PER VIA TOPICA NELLA TERAPIA DELL'ACNE: STUDIO CONTROLLATO IN DOPPIO CIECO PER LA VALUTAZIONE DI EFFICACIA E NON ASSORBIMENTO TRANSCUTANEO.
AU Priano L.; Borghi S.; Isola V.; Grazioli I.; Melzi G.; Massone L.
CS c/O Direzione Medico Scientifica, Schiapparelli Searle, Corso Belgio 86, 10153 Torino, Italy
SO Giornale Italiano di Dermatologia e Venereologia, (1993) 128/4 (XXVII-XXX).
ISSN: 0026-4741 CODEN: GIDVDZ
CY Italy
DT Journal; Article
FS 013 Dermatology and Venereology
030 Pharmacology
037 Drug Literature Index
LA Italian
SL Italian; English
TI [Topical **spironolactone** 5% versus benzoylperoxide 5% + miconazole 2% in the therapy of **acne**: Double-blind, controlled study to evaluate the efficacy and the eventual systemic absorption].
SPIRONOLATTONE 5% VERSO BENZOILPEROSSIDO 5% + MICONAZOLO 2%, PER VIA TOPICA NELLA TERAPIA DELL'ACNE: STUDIO CONTROLLATO IN DOPPIO CIECO PER LA VALUTAZIONE DI EFFICACIA E NON ASSORBIMENTO TRANSCUTANEO.

L13 ANSWER 22 OF 41 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
AN 89132781 EMBASE
DN 1989132781
TI Use of **spironolactone** in **acne** patients.
AU Bravo Garcia M.; Barroeta S.; Mejia de Alejos M.; Franco de Arias M.;

Yustiz M.A.; Mascia S.
CS Hospital Central 'Antonio Maria Pineda', Barquisimeto, Venezuela
SO Archivos Argentinos de Dermatologia, (1987) 37/4 (231-238).
ISSN: 0066-6750 CODEN: AADMAJ
CY Argentina
DT Journal
FS 013 Dermatology and Venereology
037 Drug Literature Index
LA Spanish
SL English; French
TI Use of **spironolactone** in **acne** patients.

L13 ANSWER 23 OF 41 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
AN 88259877 EMBASE
DN 1988259877
TI **Spironolactone** therapy in **acne** patients.
AU Azizlerli G.; Ozarmagan G.; Taklifi B.; Sudogan S.; Azizlerli H.
CS Dermatoloji Anabilim Dali, Istanbul Tip Fakultesi, Istanbul Universitesi, Istanbul, Turkey
SO Deri Hastaliklari ve Frengi Arsivi, (1988) 22/2-3 (125-129).
CODEN: DHFAEB
CY Turkey
DT Journal
FS 013 Dermatology and Venereology
037 Drug Literature Index
038 Adverse Reactions Titles
LA Turkish
SL English
TI **Spironolactone** therapy in **acne** patients.

L13 ANSWER 24 OF 41 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
AN 88239314 EMBASE
DN 1988239314
TI Treatment of **acne vulgaris** with **spironolactone** and androcur.
AU Vohradnikova O.; Arenberger P.; Kratochvilova M.; Zaruba F.
CS Katedra Dermatovenerologie Fakulty Vseobecneho Lekarstvi UK, Praha, Czechoslovakia
SO Cesko-Slovenska Dermatologie, (1988) 63/5 (308-310).
ISSN: 0009-0514 CODEN: CEDEAB
CY Czechoslovakia
DT Journal
FS 013 Dermatology and Venereology
037 Drug Literature Index
LA Czech
SL English
TI Treatment of **acne vulgaris** with **spironolactone** and androcur.

L13 ANSWER 25 OF 41 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
AN 88198029 EMBASE
DN 1988198029
TI Treatment of **acne vulgaris** with **spironolactone**.
AU Arenberger P.; Vohradnikova O.; Zaruba F.
CS I Dermatovenerologicka Klinika Fakulty Vseobecneho Lekarstvi UK, Praha, Czechoslovakia
SO Cesko-Slovenska Dermatologie, (1988) 63/4 (224-227).
ISSN: 0009-0514 CODEN: CEDEAB
CY Czechoslovakia
DT Journal
FS 013 Dermatology and Venereology
037 Drug Literature Index
LA Czech
SL English

TI Treatment of **acne vulgaris** with **spironolactone**.

L13 ANSWER 26 OF 41 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
AN 88057124 EMBASE
DN 1988057124

TI Anti-androgenous treatment of **acne**: treatment with
spironolactone.

AU Pizzino D.; Bettoli V.; Varotti C.
CS Universita di Bologna, Istituto di Clinica Dermatologica, Bologna, Italy
SO Giornale Italiano di Dermatologia e Venereologia, (1987) 122/11
(599-604).
ISSN: 0026-4741 CODEN: GIDVDZ

CY Italy
DT Journal
FS 013 Dermatology and Venereology
037 Drug Literature Index

LA Italian
SL English

TI Anti-androgenous treatment of **acne**: treatment with
spironolactone.

L13 ANSWER 27 OF 41 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
AN 88022972 EMBASE
DN 1988022972

TI Compared study with a cream containing **spironolactone** in the
therapy of **acne**.

AU Veneroni G.
CS Ospedale Fatebenefratelli, Servizio di Immunoematologia, Milano, Italy
SO Acta Toxicologica et Therapeutica, (1987) 8/2 (205-215).
ISSN: 0393-635X CODEN: ATTHEH

CY Italy
DT Journal
FS 013 Dermatology and Venereology
030 Pharmacology
037 Drug Literature Index

LA Italian
SL English

TI Compared study with a cream containing **spironolactone** in the
therapy of **acne**.

L13 ANSWER 28 OF 41 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
AN 88022971 EMBASE
DN 1988022971

TI Topical treatment of seborrhoic **acne** employing
spironolactone.

AU Ventura P.; Girola M.
CS Ospedali Riuniti di Bergamo, III Divisione Medica, Bergamo, Italy
SO Acta Toxicologica et Therapeutica, (1987) 8/2 (193-203).
ISSN: 0393-635X CODEN: ATTHEH

CY Italy
DT Journal
FS 013 Dermatology and Venereology
030 Pharmacology
037 Drug Literature Index

LA Italian
SL English

TI Topical treatment of seborrhoic **acne** employing
spironolactone.

L13 ANSWER 29 OF 41 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
AN 77032536 EMBASE
DN 1977032536

TI [Treatment of seborrhea and **acne** with **progesterone**].
TRAITEMENT DE LA SEBORRHEE ET DE L'ACNE PAR LA PROGESTOSOL.

AU Daniel F.
CS France
SO Concours Medical, (1976) 98/11 (1641-1642).
CODEN: COMEAO
DT Journal
FS 037 Drug Literature Index
LA French
TI [Treatment of seborrhea and acne with progesterone].
TRAITEMENT DE LA SEBORRHEE ET DE L'ACNE PAR LA PROGESTOSOL.

L13 ANSWER 30 OF 41 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
AN 77006735 EMBASE
DN 1977006735
TI Trial of Progestosol (progesterone) in 50 patients with
seborrhea of the scalp and acne of the face and back (French).
AU Guilaine J.
CS Lab. Besins Iscovesco., Paris, France
SO Medecine Interne, (1975) 10/11 (572-573).
CODEN: MEITAL
DT Journal
FS 037 Drug Literature Index
038 Adverse Reactions Titles
013 Dermatology and Venereology
LA French
TI Trial of Progestosol (progesterone) in 50 patients with
seborrhea of the scalp and acne of the face and back (French).

L13 ANSWER 31 OF 41 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
AN 76091319 EMBASE
DN 1976091319
TI [Percutaneous progesterone in the treatment of acne
and seborrheic states of the skin and scalp. Study of 66 cases].
LA PROGESTERONE PERCUTANEE DANS LE TRAITEMENT DE L'ACNE
ET DES ETATS SEBORRHEIQUES DE LA PEAU ET DU CUIR CHEVELU. ETUDE DE 66 CAS.
AU Fayolle J.
CS Consult. Dermatol., Hop. Croix Rousse, Lyon, France
SO Lyon Medical, (1975) 233/12 (1303-1305).
CODEN: LYMEAN
DT Journal
FS 037 Drug Literature Index
LA French
TI [Percutaneous progesterone in the treatment of acne
and seborrheic states of the skin and scalp. Study of 66 cases].
LA PROGESTERONE PERCUTANEE DANS LE TRAITEMENT DE L'ACNE
ET DES ETATS SEBORRHEIQUES DE LA PEAU ET DU CUIR CHEVELU. ETUDE DE 66 CAS.

L13 ANSWER 32 OF 41 IFIPAT COPYRIGHT 2003 IFI on STN
AN 1624165 IFIPAT;IFIUDB;IFICDB
TI SPIRONOLACTONE CONTAINING COMPOSITION FOR COMBATTING
ACNE
INF Messina, Michele, Turin, IT
IN MESSINA MICHELE (IT)
PAF Schiapparelli Farmaceutici SpA, Turin, IT
PA SCHIAPPARELLI FARMACEUTICI SPA IT (13097)
EXNAM Roberts, Elbert L
AG Oblon, Fisher, Spivak, McClelland & Maier
PI US 4543351 19850924
AI US 1984-593926 19840327
XPD 27 Mar 2004
PRAI IT 1983-A20435 19830401
FI US 4543351 19850924
DT UTILITY; REASSIGNED
FS CHEMICAL
GRANTED

MRN 004425 MFN: 0840
CLMN 3
TI **SPIRONOLACTONE CONTAINING COMPOSITION FOR COMBATTING ACNE**
AB A spironolactone containing composition for topical use in the form of a cream active in combatting acne and causing only skin absorption and therefore devoid of any undesired systemic effect.

L13 ANSWER 33 OF 41 SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN
AN 96:79431 SCISEARCH
GA The Genuine Article (R) Number: TP690
TI SIDE-EFFECTS OF **SPIRONOLACTONE** IN WOMEN WITH **ACNE**
AU LUBBOS H (Reprint); KELIJMAN M; SPIELVOGEL R L; ROSE L I
CS MED COLL PENN, DEPT MED & DERMATOL, PHILADELPHIA, PA, 19129; HAHNEMANN UNIV, PHILADELPHIA, PA, 19102
CYA USA
SO JOURNAL OF INVESTIGATIVE MEDICINE, (JAN 1996) Vol. 44, No. 1, pp. A51.
ISSN: 1081-5589.
DT Conference; Journal
FS LIFE; CLIN
LA ENGLISH
REC No References
TI SIDE-EFFECTS OF **SPIRONOLACTONE** IN WOMEN WITH **ACNE**

L13 ANSWER 34 OF 41 SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN
AN 88:506274 SCISEARCH
GA The Genuine Article (R) Number: P9470
TI TOPICAL **SPIRONOLACTONE** INHIBITS DIHYDROTESTOSTERONE RECEPTORS IN HUMAN SEBACEOUS GLANDS - AN AUTORADIOGRAPHIC STUDY IN SUBJECTS WITH **ACNE-VULGARIS**
AU BERARDESCA E (Reprint); GABBA P; UCCI G; BORRONI G; RABBIOSSI G
CS UNIV PAVIA, DEPT DERMATOL, I-27100 PAVIA, ITALY; UNIV PAVIA, DEPT MED, I-27100 PAVIA, ITALY
CYA ITALY
SO INTERNATIONAL JOURNAL OF TISSUE REACTIONS-EXPERIMENTAL AND CLINICAL ASPECTS, (1988) Vol. 10, No. 2, pp. 115-119.
DT Article; Journal
FS LIFE
LA ENGLISH
REC Reference Count: 9
TI TOPICAL **SPIRONOLACTONE** INHIBITS DIHYDROTESTOSTERONE RECEPTORS IN HUMAN SEBACEOUS GLANDS - AN AUTORADIOGRAPHIC STUDY IN SUBJECTS WITH **ACNE-VULGARIS**

L13 ANSWER 35 OF 41 SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN
AN 85:470915 SCISEARCH
GA The Genuine Article (R) Number: APK10
TI TREATING **ACNE** WITH ANTIANDROGENS - THE CONFIRMATION OF THE VALIDITY OF A PERCUTANEOUS TREATMENT WITH **SPIRONOLACTONE**
AU MESSINA M (Reprint); MANIERI C; RIZZI G; GENTILE L; MILANI P
CS UNIV TURIN, INST INTERNAL MED, CORSO POLONIA 14, I-10126 TURIN, ITALY (Reprint)
CYA ITALY
SO CURRENT THERAPEUTIC RESEARCH-CLINICAL AND EXPERIMENTAL, (1985) Vol. 38, No. 2, pp. 269-282.
DT Article; Journal
FS LIFE; CLIN
LA ENGLISH
REC Reference Count: 38
TI TREATING **ACNE** WITH ANTIANDROGENS - THE CONFIRMATION OF THE VALIDITY OF A PERCUTANEOUS TREATMENT WITH **SPIRONOLACTONE**

L13 ANSWER 36 OF 41 SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN

AN 84:431352 SCISEARCH
GA The Genuine Article (R) Number: TE385
TI ORAL SPIRONOLACTONE IMPROVES ACNE-VULGARIS AND REDUCES
SEBUM EXCRETION
AU GOODFELLOW A; ALAGHBANDZADEH J; CARTER G; CREAM J J; HOLLAND S; SCULLY J;
WISE P (Reprint)
CS CHARING CROSS HOSP, DEPT DERMATOL, LONDON W6 8RF, ENGLAND; CHARING CROSS
HOSP, DEPT CLIN PATHOL, LONDON W6 8RF, ENGLAND; CHARING CROSS HOSP, DEPT
ENDOCRINOL, LONDON W6 8RF, ENGLAND
CYA ENGLAND
SO BRITISH JOURNAL OF DERMATOLOGY, (1984) Vol. 111, No. 2, pp.
209-214.
DT Article; Journal
FS LIFE; CLIN
LA ENGLISH
REC Reference Count: 17
TI ORAL SPIRONOLACTONE IMPROVES ACNE-VULGARIS AND REDUCES
SEBUM EXCRETION

L13 ANSWER 37 OF 41 SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN
AN 83:438483 SCISEARCH
GA The Genuine Article (R) Number: RE322
TI A NEW THERAPEUTIC APPROACH TO ACNE - AN ANTI-ANDROGEN
PERCUTANEOUS TREATMENT WITH SPIRONOLACTONE
AU MESSINA M (Reprint); MANIERI C; RIZZI G; MOLINATTI G M
CS UNIV TURIN, INST ENDOCRINOL, DEPT ENDOCRINOL, I-10126 TURIN, ITALY
(Reprint)
CYA ITALY
SO CURRENT THERAPEUTIC RESEARCH-CLINICAL AND EXPERIMENTAL, (1983)
Vol. 34, No. 2, pp. 319-324.
DT Article; Journal
FS LIFE; CLIN
LA ENGLISH
REC Reference Count: 7
TI A NEW THERAPEUTIC APPROACH TO ACNE - AN ANTI-ANDROGEN
PERCUTANEOUS TREATMENT WITH SPIRONOLACTONE

L13 ANSWER 38 OF 41 SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN
AN 79:4201 SCISEARCH
GA The Genuine Article (R) Number: GB923
TI CLINICAL USEFULNESS OF SPIRONOLACTONE IN TREATMENT OF
ACNE AND HIRSUTISM
AU BOISSELLE A (Reprint); TREMBLAY R R
CS CTR HOSP UNIV LAVAL, RECH ENDOCRINOL LAB, QUEBEC CITY G1V 4G2, QUEBEC,
CANADA
CYA CANADA
SO CLINICAL RESEARCH, (1978) Vol. 26, No. 6, pp. A840.
DT Conference; Journal
FS LIFE
LA ENGLISH
REC No References
TI CLINICAL USEFULNESS OF SPIRONOLACTONE IN TREATMENT OF
ACNE AND HIRSUTISM

L13 ANSWER 39 OF 41 SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN
AN 76:422130 SCISEARCH
GA The Genuine Article (R) Number: CP062
TI MANAGEMENT OF ACNE FLARE-UP DURING PROGESTERONE
THERAPY FOR PREGNANCY
AU REISNER R M (Reprint)
CS UNIV CALIF LOS ANGELES, SCH MED, LOS ANGELES, CA, 90024
CYA USA
SO JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, (1976) Vol.
236, No. 24, pp. 2798.

DT Letter; Journal
LA ENGLISH
REC No References
TI MANAGEMENT OF ACNE FLARE-UP DURING PROGESTERONE
THERAPY FOR PREGNANCY

L13 ANSWER 40 OF 41 TOXCENTER COPYRIGHT 2003 ACS on STN
AN 1984:2270 TOXCENTER
CP Copyright 2003 ASHP
DN 22-10293
TI Oral **spironolactone** improves **acne vulgaris** and reduces
sebum excretion
AU Goodfellow, A.; Alaghband-Zadeh, J.; Carter, G.; Cream, J. J.; Wise, P.;
et al
CS Dept. of Endocrinology, Charing Cross Hosp. (Fulham), Fulham Palace Rd.,
London W6 8RF, England
SO British Journal of Dermatology (England), (Aug 1984) Vol. 111,
pp. 209-214. 17 Refs.
CODEN: BJDEAZ. ISSN: 0007-0963.
DT Journal
FS IPA
OS IPA 84:9365
LA English
ED Entered STN: 20011116
Last Updated on STN: 20011116
TI Oral **spironolactone** improves **acne vulgaris** and reduces
sebum excretion
AB The effect of 3 months' treatment with spironolactone (50-200 mg daily) on
sebum excretion and clinical and endocrine status in 26 male and female
patients with severe acne was evaluated in a double blind, placebo
controlled trial. The drug reduced sebum extraction in all female
patients, but there was no correlation between sebum response and androgen
status. The clinical response was dose dependent, with maximum subjective
and objective benefit when doses of 150-200 mg were used. The usefulness
in males was limited by gynecomastia and impotence which is common with
prolonged treatment.
Victor Origoni

L13 ANSWER 41 OF 41 TOXCENTER COPYRIGHT 2003 ACS on STN
AN 1983:1168 TOXCENTER
CP Copyright 2003 ASHP
DN 21-04531
TI New therapeutic approach to **acne**: antiandrogen percutaneous
treatment with **spironolactone**
AU Messina, M.; Manieri, C.; Rizzi, G.; Molinatti, G. M.
CS Dept. of Endocrinology, Univ. of Turin, C. so Polonia 14, 10126 Turin,
Italy
SO Current Therapeutic Research (USA), (Aug 1983) Vol. 34, pp.
319-324. 7 Refs.
CODEN: CTCEA9. ISSN: 0011-393X.
DT Journal
FS IPA
OS IPA 83:3716
LA English
ED Entered STN: 20011116
Last Updated on STN: 20011116
TI New therapeutic approach to **acne**: antiandrogen percutaneous
treatment with **spironolactone**
AB The therapeutic effects of 5% spironolactone (I; SAS-1060) cream (about
70-80 mg of I applied twice daily for 40 days) were evaluated in 13
patients with acne and seborrhea. Twelve of the patients showed a
distinct improvement in their condition after the course of treatment.
There were no systemic side effects. It was determined that percutaneous
treatment with I cream is useful for treatment of acne.

Mary C. Love

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